Wireless Instant Messaging Strategic Portfolio Development

MOTOROLA FORT WORTH

Committee Review

Submitted Pursuant To
Employment Agreement

MOTOROLA PATENT COMMITTEE

Rev. 0.1 12/13/99

OIPE JC73
AUG 2 4 2004
PATENT & TRADEMARK OFFICE

Intellectual Property Dept. Use Only	
Discl. #	PE335912A
Discl. Date	12-1-00
Committee Action	

THIS SECTION TO BE COMPLETED BY INVENTOR(S)

(Additional info on most questions is in the Status Bar at the bottom of the window.)
(TAB & Shift-TAB(to back up) thru the fields to enter data.)

1. Name of Invention: (Please limit to 10 words or less.) **Differential IM Status Change Indication**
2. Documentation Date: **11/16/00**
   (Attach log sheets, drawings, etc., to support the earliest date you documented your idea.)

3. Whom did you first tell about your invention?
   Name: **Kevin Mowry** Date: **11/9/00**

4. Is this disclosure being submitted as an Ornamental Design Disclosure? Yes/No **No**
   If YES, please attach a completed Ornamental Design Disclosure Form along with this disclosure.

5. What problem is solved by this invention? (Attach additional sheets if necessary.) **Instant messaging is being expanded to operate on wireless devices. In normal IM operation there is a large amount of duplicate information that can be sent to a wireless device in order to maintain a current buddy list. Since wireless devices operate on systems with limited bandwidth, the amount of information sent to wireless devices needs to be selective, concise, and informative.**

6. Identify related technology. (Attach additional sheets if necessary.) **In current IM systems, a user can manually set his/her status to indicate such things as "out of office", "busy", "out to lunch", "on phone call", etc.**

7. Describe the invention, and how it solves the problem(s) in a way not accomplished before. Attach additional sheets describing the invention in detail. **This invention reduces the amount of bandwidth consumed by sending only the buddy list information that has changed since the last connection with the server. See info on additional sheets.**

THIS SECTION TO BE COMPLETED BY ENGINEERING MGR OR HIGHER

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1. Product invention is to be used on.(If a process, name the 1st product the process is to be used on.) **TBD**
2. This product will be(has been) offered for sale, quoted to a customer, or shipped. Yes/No **No** If YES, indicate the earliest date any of these will (have) occur(red).

3. This invention is to be(has been) disclosed outside Motorola: Yes/No **No**
   If YES, indicate the date _____ and the other party.
4. Was a non-disclosure agreement in place covering the admitted disclosure? Yes/No **N/A**
5. Name of Engineering Manager (or higher) who attests to the accuracy of this section:
   Typed: **Dwight Smith**
   Phone: **817.245.2380** Signature: _____ Date: 3c Nov 2000

ALL BLANKS MUST BE COMPLETED AND ALL ADDITIONAL SHEETS MUST BE SIGNED & DATED BY ALL INVENTORS AND TWO WITNESSES.

MOTOROLA FORT WORTH — Utility Patent Disclosure

Delta IM Status change

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WITNESS NAMES & SIGNATURES:

The witnesses, in signing this form, attest to the fact that they understand the invention.

WITNESS NAME (PRINTED or TYPED)	PHONE	WITNESS SIGNATURE	DATE
W Garland Phillips	52358	*(signature)*	11/30/2000
SRIKANTH VEDIRE	2728	*Srikanth Vedire*	11/20/2000

More inventors? Click HERE to make use of the More Inventors link.

MOTOROLA FORT WORTH   **Utility Patent Disclosure**
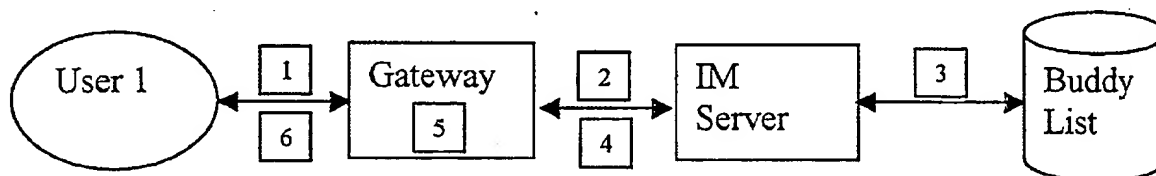
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STOP TABBING NOW!!!

Use this page and others below to add information necessary to fully describe your invention. (You may also attach other info, such as copied log book sheets, etc.) CLICK in the blank area below and add whatever info you want, just as you would in any WORD document. BUT KEEP YOUR INFO BETWEEN THE ASTERISK LINES BELOW. DO NOT ATTEMPT TO UNPROTECT THIS DOCUMENT – YOU COULD LOSE ALL THE INFORMATION YOU HAVE ENTERED.
****************************BEGIN * ADDING * INFO * BELOW ******************************

In normal IM operation on a wireless device, the user establishes a connection with a gateway and the gateway will send a request to the IM server for a buddy list. The IM server will send a buddy list back to the gateway and this will then be forwarded to the wireless device.

The invention described below will show how with multiple re-connections (i.e. going in and out of coverage, turning the device on and off) only the difference in the buddy list will be sent to the wireless device. In order to determine the necessary information to send to the device, the difference between the two buddy lists (a previously sent buddy list and a current buddy list) needs to be determined. The differences in the buddy lists will be sent to the user.

In step 1 the wireless device establishes a connection with the gateway. Within the connection there would likely be a identifier for the buddy list the wireless device currently has stored on it. If the wireless device were connecting to the gateway for the first time then no identifier for a buddy list would exist. The user would simply receive a complete buddy list for the first time.

In step 2 the gateway will send a request to the IM server for the user's buddy list.

In step 3 the IM server will retrieve the current buddy list for the corresponding user.

In step 4 the IM server fulfills the request by sending the user's buddy list to the gateway.

In step 5 the gateway will take the current buddy list and compare it against the buddy list sent on a prior connection to determine any differences between the two.

In step 6 the gateway will send these differences to the wireless device. If the versions were the same the device would be informed that its list is current.

ALL Inventors and two Witnesses must SIGN & DATE all additional pages.

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Additional Items

Various available technologies, such as those used in synchronization services, could be used to manage and track the versions of the buddy list data. Ideally, such a technology could be utilized for the transactions occurring between the wireless device and the gateway. As such, this invention does not make any claims regarding the methods utilized to update the specific buddy list data as that would likely be an implementation choice of this underlying scheme. Similarly, the identifiers utilized to characterize the buddy list would be dependent upon these schemes as well.

In cases where multiple devices may be utilized by a user for the same IM account, this approach keeps the "current device" up-to-date with respect to the buddy list. If a user were to activate his IM client on another device while a previous session were in place it would be possible for the gateway to bypass the check with the IM server as it would have a current copy of the buddy list data available.

In a synthesis of the above two items, a synchronization scheme could actively update the buddy lists of a user's various devices that did not have their IM client operating. This could happen immediately upon changes are received by the gateway or could occur periodically. This would require a gateway to 'know' the devices that a user utilizes for the service a-priori to permit it to direct such update requests to them directly. The benefit of this approach would be to minimize the update times when an IM client is started on a device that is not frequently used.

******************************** END * OF * DISCLOSURE ********************************

When you have completed your disclosure, you may print it, or you may save it by using the SAVE AS command and renaming it. When you print your disclosure, you may have a few extra pages that are not part of the disclosure, and you may discard them.

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